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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,919	11/24/2003	Finn Aagaard	Y3.0074	5228
29438	7590	11/17/2008		
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ALGONGUIN, IL 60102-2639				
EXAMINER				
PALO, FRANCIS T				
ART UNIT		PAPER NUMBER		
3644				
MAIL DATE		DELIVERY MODE		
11/17/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

## Application No.

10/720,919

## Applicant(s)

AAGAARD, FINN

## Examiner

Francis T. Palo

## Art Unit

3644

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1, 4-12, 14-17 and 19-26 is/are pending in the application.
- 4a) Of the above claim(s) 19 and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4-12, 14-17 and 21-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment / Arguments***

Applicant's arguments filed 2/22/08 have been fully considered but they are not persuasive.

Applicant submits:

Removal of water from or adding water to plants at the ball thereof through the same overhead pipe is nowhere suggested by the applied references.

The examiner responds:

Midwest teaches delivery and removal of water to a plant tray through the same line as does the instant invention; Midwest does not teach an overhead delivery pipe as claimed.

It is respectfully submitted that it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have upgraded the growing facility of McLellan '015, which has an overhead water delivery system, with an ebb-flo irrigation system such as taught by Midwest, and in adapting the ebb-flo of Midwest to the overhead delivery system of McLellan, would have arrived at the same solution as broadly claimed in the instant invention.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1, 4-12, 14-17 and 21-26** are rejected under 35 U.S.C. 103(a),  
as being unpatentable over **McLellan** (US 1,939,015) 1933,  
in view of **Midwest Growmaster, Inc.** ([www.midgro.com](http://www.midgro.com)) 2002.

Regarding **claim-1**:

**McLellan '015** teaches a growing facility which has an overhead water delivery system; McLellan does not however teach delivery and removal of water to a plant tray through the same line, as claimed.

**Midwest Growmaster** teaches an installation for delivery and removal of water to a plant tray through the same line, as claimed; **Midwest** does not however teach a delivery pipe from an overhead pipe system as claimed.

It is submitted that one of ordinary skill in the art looking to modify the growing facility of McLellan with an alternate bench/irrigation system, and presented with the Midwest system teaching, would arrive at the same solution in adapting the table valve and return valve installation of Midwest to the overhead pipe system of McLellan, as broadly claimed; as where a claimed improvement on a device or apparatus is no more than "the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for improvement," the claim is unpatentable under 35 U.S.C. 103(a). Ex Parte Smith, 83 USPQ.2d 1509, 1518-19 (BPAI, 2007) (citing KSR v. Teleflex, 127 S.Ct. 1727, 1740, 82 USPQ2d 1385, 1396 (2007)).

Accordingly, applicant claims a combination that only unites old elements with no change in the respective functions of those old elements, and the combination of those elements yields predictable results; absent evidence that the modifications necessary to effect the combination of elements is uniquely challenging or difficult for one of ordinary skill in the art, the claim is unpatentable as obvious under 35 U.S.C. 103(a). Ex Parte Smith, 83 USPQ.2d at 1518-19 (BPAI, 2007) (citing KSR, 127 S.Ct. at 1740, 82 USPQ2d at 1396.

Accordingly, since the applicant has submitted no persuasive evidence that the combination of the above elements is uniquely challenging or difficult for one of ordinary skill in the art, the claim is unpatentable as obvious under 35 U.S.C. 103(a),

because it is no more than the predictable use of prior art elements according to their established functions resulting in the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for improvement.

McLellan as modified by Midwest also renders obvious a remote water storage tank, wherein the modified system would be capable of reconfiguration as claimed.

As to a controller as claimed; the common knowledge or well-known in the art statement submitted in the previous non-final office action, that is, the obvious use of a controller as claimed, is taken to be admitted prior art because applicant either failed to traverse the examiner's assertion of official notice or that the traverse was inadequate.

**Regarding claim-4:**

The discussion above regarding claim-1 is relied upon.

As previously submitted in the previous non-final office action, Midwest teaches a quick valve or venturi vacuum pump as claimed.

As to the piping configuration recited in (b)-(f) of the instant claim; as discussed above in the discussion of claim-1, one of ordinary skill in the art would arrive at the same solution in adapting the irrigation installation of Midwest to the overhead pipe system of McLellan, as claimed.

Regarding **claim-5**:

The discussion above regarding claim-4 is relied upon.

As previously submitted in the previous non-final office action, Midwest teaches a return valve or check valve as claimed, for preventing backflow.

Regarding **claim-6**:

The discussion above regarding claim-5 is relied upon.

As previously submitted in the previous non-final office action, Midwest teaches T-lines, as claimed.

Regarding **claims 7 and 8**:

The discussion above regarding claim-6 is relied upon.

As previously submitted in the previous non-final office action, Midwest teaches solenoid valves, and the obviousness of using a controller has sufficiently been discussed above,

Regarding **claims 9 and 10**:

The discussion above regarding claim-8 is relied upon.

As previously submitted in the previous non-final office action, Midwest teaches the use of the quick valve which operates on the venture principle, which is capable of the operational and functional language recited in the instant claims.

As to the piping configuration recited in the instant claims; as discussed above in the discussion of claim-1, one of ordinary skill in the art would arrive at the same solution in adapting the irrigation installation of Midwest to the overhead pipe system of McLellan, as claimed.

Regarding **claim-11**:

The discussion above regarding claim-10 is relied upon.

As previously submitted in the previous non-final office action, Midwest teaches the use of the check valve, and relocation or use in general would require only ordinary skill in the art, for the well-known advantages of that feature.

Regarding **claim-12**:

The discussion above regarding claim-10 is relied upon.

As previously submitted in the previous non-final office action, Midwest depicts a poly pipe, which is readable on the input line as claimed.



Regarding **claim-14**:

The discussion above regarding claim-12 is relied upon.

The obviousness of the use of a controller has been sufficiently discussed above, the use of which with timers as claimed, is known in the art.

Regarding **claims 15-17**:

The discussion above regarding claim-14 is relied upon.

As previously submitted in the previous non-final office action, Midwest depicts assemblies as claimed.

Regarding new **claims 21-26**:

Applicant submits in the Remarks filed 2/22/08 that newly added claims 21-26 will be considered as rejected on the same basis as the claims on which they are based.

Claims 21-26 are therefore rejected on the basis that the claims on which they are based have been rejected as discussed above.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Francis T. Palo whose telephone number is 571-272-6907. The examiner can normally be reached on M-Tu.,Th.-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Mansen can be reached on 571-272-6608. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.

Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Francis T. Palo/  
Primary Examiner  
Art Unit 3644